

CLAIMS:

1. A method of encrypting a video data stream, said video data stream partitioned into units based upon a type of data contained within said units, comprising:
 - determining for each unit the type of data contained within said unit; and
 - encrypting a particular unit or a portion of said particular unit based upon the type of data contained within said unit.
2. The method of claim 1, wherein said type of data is data selected from the group consisting of header data, intra data and inter data.
3. The method of claim 2, wherein said intra data is selected from the group consisting of I block data and SI block data and wherein said inter data is selected from the group consisting of P block data, B block data and SP block data.
4. The method of claim 1, further including excluding a particular unit from encryption based upon the type of data contained within said particular unit.
5. The method of claim 1, wherein each unit containing the same type of data is always encrypted.
6. The method of claim 1, wherein each unit containing the same type of data is encrypted identically.
7. The method of claim 1, wherein units containing different types of data are encrypted using different encryption methods, different encryption keys or both different encryption methods and different encryption keys.
8. A method of encrypting a video data stream, said video data stream partitioned into NAL units formed from partitioned slices, each NAL unit containing either header data, intra data or inter data, comprising:

determining for each NAL unit whether the NAL unit contains header data, intra data or inter data ; and

encrypting a particular NAL unit or a portion of said particular NAL unit based upon whether said particular NAL unit contains header data, intra data or inter data.

9. The method of claim 8, wherein said intra data is selected from the group consisting of I block data and SI block data and wherein said inter data is selected from the group consisting of P block data, B block data and SP block data.

10. The method of claim 8, further including excluding a particular unit from encryption based upon the type of data contained within said particular unit.

11. The method of claim 8, wherein each NAL unit containing header data is not encrypted or encrypted identically, each NAL unit containing intra data is not encrypted or encrypted identically, and each NAL unit containing inter data is not encrypted or encrypted identically.

12. The method of claim 8, wherein at least two types of NAL units selected from the group of NAL unit types consisting of NAL units containing header data, NAL units containing intra data and NAL units containing inter data are encrypted using, for each type of NAL unit, different encryption methods, different encryption keys or both different encryption methods and different encryption keys.

13. The method of claim 8, wherein said portion of said particular NAL unit to be encrypted is selected from the group consisting of NAL headers, one or more fields within said NAL headers, RBSP fields, one or more sub-fields within said RBSP fields and selected groups of bits within said NAL unit.

14. The method of claim 8, further including embedding decryption information in NAL headers, in one or more fields within said NAL headers, in RBSP fields, in one or more sub-fields within the RBSP fields or in selected groups of bits within said NAL unit.

15. A system for encrypting a video data stream, said video data stream partitioned into units based upon a type of data contained within said units comprising:

means for determining for each unit the type of data contained within said unit; and

means for encrypting a particular unit or a portion of said particular unit based upon the type of data contained within said unit.

16. The system of claim 15, wherein said type of data is selected from the group consisting of header data, intra data and inter data.

17. The system of claim 16, wherein said intra data is selected from the group consisting of I block data and SI block data and wherein said inter data is selected from the group consisting of P block data, B block data and SP block data.

18. The system of claim 15, further including means for not encrypting a particular unit based upon the type of data contained within said unit.

19. The system of claim 15, wherein said means for encrypting is adapted to always encrypt units containing the same type of data.

20. The system of claim 15, wherein said means for encrypting is adapted to identically encrypt all units containing the same type of data.

21. The system of claim 15, wherein said means for encrypting is adapted to encrypt units containing different types of data by different encryption methods, different encryption keys or both different encryption methods and different encryption keys.

22. A system of encrypting a video data stream, said video data stream partitioned into NAL units formed from partitioned slices, each NAL unit containing either header data, intra data or inter data, comprising:

means for determining for each NAL unit whether the NAL unit contains header data, intra data or inter data ; and

means for encrypting a particular NAL unit or a portion of said particular NAL unit based upon whether said particular NAL unit contains header data, intra data or inter data.

23. The system of claim 22, wherein said intra data is selected from the group consisting of I block data and SI block data and wherein said inter data is selected from the group consisting of P block data, B block data and SP block data.

24. The system of claim 22, wherein said means for encrypting is adapted to exclude a particular unit from encryption based upon the type of data contained within said particular unit.

25. The system of claim 22, wherein said means for encrypting is adapted to not encrypt or to identically encrypt each NAL unit containing header data or is adapted to not encrypt or to identically encrypt each NAL unit containing intra data, and is adapted to not encrypt or to identically encrypt each NAL unit containing inter data.

26. The system of claim 22, wherein said means for encrypting is adapted to encrypt at least two types of NAL units selected from the group of NAL unit types consisting of NAL units containing header data, NAL units containing intra data and NAL units containing inter data using, for each type of NAL unit, different encryption methods, different encryption keys or both different encryption methods and encryption keys.